

# Pharmacy NewsCapsule

Division of Supportive Living (DSL)/Bureau of Quality Assurance (BQA)

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## Herbal Supplement: Focus SAM-e

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S-adenosylmethionin (SAM-e) is a natural dietary supplement used for treating depression. As a surveyor you may see this supplement being used by patients and residents in all types of healthcare and community settings.

This nutritional supplement has been around for about 50 years. SAM-e has been studied mainly for depression. According to studies and biochemistry, SAM-e is produced in the body from methionine, an amino acid and adenosine triphosphate (ATP). That means SAM-e is naturally produced in our body. Studies suggest that SAM-e works by boosting levels of neurotransmitters like serotonin, dopamine and norepinephrine.

So why do people take SAM-e? Studies indicate that individuals who have depression, Alzheimer's disease, dementia, and Parkinson's have lower than normal levels of SAM-e. Physically these disease states will also have lower levels of neurotransmitters. Theory suggests that if you take a supplement of SAM-e you will increase naturally occurring SAM-e and increase neurotransmitters which has an effect in treating depression.

Studies exist that show SAM-e has been effective in treating resistant depression. The supplement has

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## Weight Loss and Medications

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Weight loss and malnutrition is a significant cause of morbidity and mortality in elderly individuals. In effect, elderly individuals who experience involuntary weight loss from one cause or another are actually starving to death.

What are some of the causes of involuntary weight loss? You may have heard about "MEALS ON WHEELS." This mnemonic developed by Morley et.al. relates to weight loss causes and stands for the following :

### Medication

Emotional problems

Anorexia

Late-life paranoia

Swallowing disorders

### Oral factors

No money

Wandering and other dementia-related behavior

Hyperthyroidism, hyperparathyroidism, hypoadrenalism

Enteric problems (malabsorption)

Eating problems (unable to feed oneself)

Low-salt, low cholesterol diets

Stones (renal)

In this newsletter, I will focus on medications as the cause. The medications that are commonly prescribed to the elderly that cause involuntary weight loss are: amlodipine, ciprofloxacin, conjugated estrogen, digoxin, enalapril, famotidine, fentanyl, furosemide, levothyroxine, propoxyphene, nifedipine, nizatidine, omeprazole, paroxetine, potassium, ranitidine, risperidone, sertraline and warfarin. If elderly individuals are experiencing involuntary weight loss, medications should always be reviewed in an initial assessment as the potential cause. Effective treatment for involuntary weight loss stems from finding the cause and tailoring treatment for that cause. This may include stopping an offending medication. There currently are no FDA approved drugs for treating involuntary weight loss in the elderly. However, megesterol acetate is probably most commonly used for this "off-labeled" use.

## New Drugs

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**Due to limited new drug approvals, new drugs will not be reported this issue. Approvals for the last two months will be reported in the next issue.**

There are significant medications that have come off of patent or will shortly come off of patent. That means you will see a lot of new generic medications. For example Prozac® (fluoxetine) has come off of patent. There are several generic forms of this medication. Some of the generic fluoxetine actually comes in tablet form instead of the usual capsule.

In addition to Prozac, Mevacor is coming off of patent as well. Generic versions of this drug have been approved for at least four generic companies. This is good news for consumers as costs will be significantly less for these generic medications.

Please keep in mind however that the generic drugs may look a little different. If there is a question as to what the drug is, ask the pharmacist.

## Focus Drug of the Month- Adult Immunizations

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Pharmacy Practice Consultant PRQI

Remember the shots you got as a child? Well many of those shots require boosters when you get older to continue to protect you from disease.

Two immunizations that are important for adults at risk are the flu and pneumonia immunizations.

Flu, believe it or not, causes significant numbers of death each year. Some years are worse than others depending on the strains of flu and how prolific the virus spreads.

This year and last year there have been issues regarding supplies of flu vaccine not being available on a timely basis. However, in both instances overall supplies have been adequate. Since influenza has not appeared until late November or December, a flu shot in December or even January provides significant benefits.

Very often individuals may say "I had the flu shot last year and I got the flu anyway." Or others comment that the flu shot made them sick so they do not want the immunization this year. Each year the contents of the flu shot change. The contents are meant to protect against the most common predicted virus that may cause flu that year. Therefore in rare cases individuals may still get a strain of flu that makes them sick. The vaccine in some people may also make them feel sick for a day. In either case the flu shot will provide significant benefits and should not be avoided because of these experiences.

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## Med Error Corner

Doug Englebert Pharmacy Practice Consultant

Two sets of specific errors that have been documented and reported are Serzone and Seroquel mix-ups and Avandia and Coumadin mix-ups. These products are commonly used in long term care settings and are important to note.

First let's look at Serzone and Seroquel. Serzone is an antidepressant and Seroquel an antipsychotic. They both are used for mental health issues. They both start with the letters "ser." They both come in strengths of 100 mg and 200 mg tablets. Because these medications have different side effects and drug interactions, a mix-up can have negative outcomes. Therefore, carefully look at orders and prescriptions written for Seroquel and Serzone. Pharmacies, hospitals and nursing homes may wish to separate these medications in contingency boxes and other stock areas so that their closeness to one another in the kit or store room, based on the alphabetic spelling, do not allow persons to pick the wrong drug from supplies.

The second medication error is Coumadin and Avandia. They come in similar strengths and when written hastily may look similar on the prescription order. Since Avandia is for diabetes and Coumadin for clotting disorders, knowing the diagnosis can prevent this error from occurring.

been shown to be as effective as other antidepressant drugs like imipramine. There are also studies that indicated that SAM-e given along with medication like imipramine improved the antidepressant response.

Studies and reported experience indicate that SAM-e is well tolerated with minimal side effects. The primary side effects are loose bowels, mild jitteriness, and headaches. There have been limited reports of drug interactions. The most significant is the potential for serotonin syndrome that has been reported once when SAM-e was used along with imipramine. Therefore caution should be taken when SAM-e is used with other antidepressant medications. Also SAM-e, like all antidepressants, should be carefully used with anyone who has a history of cardiac arrhythmia.

Most recommendations indicate Individuals take 400 mg of SAM-e a day for depression. Some recommendations are to give 200 mg 30 minutes before breakfast and lunch to avoid some of the side effects.

In summary, SAM-e may be an alternative for effective treatment of depression. There still needs to be studies done with SAM-e and some of the newer antidepressants, like Prozac. As with all nutritional supplements or herbal products, quality varies greatly. Therefore a reliable manufacturer is essential. The elderly should start on a low dose and titrate up slowly. This may be even more important when dealing with nutritional supplements or herbals since the quality of the product is unknown.

Pneumococcal vaccine is something that is a little different. Like flu vaccine the pneumococcal vaccine is recommended for specific groups who are at significant risk if they get pneumonia or the flu. To determine who should get these shots individuals should check with their doctor for recommendations.

The pneumococcal vaccine for adults is specifically recommended for all individuals who are 65 years old or older. Individuals who are older than 65 who have had a pneumococcal vaccine in the past may need a booster if the immunization was given more than five years ago.

Once again, pneumococcal pneumonia is a deadly infection that kills many elderly individuals. Many of these deaths can be avoided with the use of the pneumococcal vaccine.

Are we doing a good job immunizing elderly individuals who reside in nursing homes or assisted living? On a national level the answer is "no". The Healthy People 2010 goal is to immunize 90% of elderly individuals. Nationally in nursing homes, data indicates that only 58.5% of resident received flu shots and 27.1% received pneumococcal vaccinations. Nationally we have a long way to go.

Shockingly, staff who work in nursing homes also have low rates of immunization. To protect the individuals staff care for, facilities and their staff should also make efforts to keep their immunizations up to date.

*If there are medications you would like featured here please send an email to Doug at [engleda@dhfs.state.wi.us](mailto:engleda@dhfs.state.wi.us)*

## Attention Nursing Home Surveyors:

- 1) As part of the Annual Survey, a closed record review is completed by the survey team. Per the State Operations Manual Task 5 C (P-31), closed record review should only include the drug regimen review (section C) if there has been a concern identified related to medications and the drug regimen. Concerns may come from quality indicators or may be a general concern identified in the drug regimen reviews conducted in the other focused or comprehensive reviews during survey.
- 2) Immunization Protocol: It is expected that the Centers for Medicare and Medicaid Services (CMS) will issue a final version of an immunization protocol in the spring of 2002. The draft of the protocol contains requirements that nursing homes establish policies and procedures to prevent flu and pneumococcal pneumonia., establish policies on vaccinations, document that residents had immunizations and document why residents did not have immunizations. The final version of the protocol may change from the draft but you may begin to have inquiries from nursing homes preparing for the requirements. When the final requirements are issued, training on the protocol will be provided to all nursing home surveyors and a BQA memo addressing the protocol will be issued to providers.

## Consultant's Corner

Doug Englebert

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This section is basically a miscellaneous section that will show up each issue and will contain tidbits of information, most of which will come directly from your questions. If there is a topic you want more detailed information about, please drop me an email at [engleda@dhfs.state.wi.us](mailto:engleda@dhfs.state.wi.us) and I'll see what I can find.

**1)** I am a nursing home surveyor and I observed the 8 a.m. med pass. There was an order for a medication that was to be given twice a day. The medication administration record indicates it should be given at 8 a.m. and 8 p.m. The nursing home did not give the medication in the morning until 11 a.m. Is this considered an error?

When determining if the timing of drug administration is considered an error, the following should be considered:

If the physician ordered the medication to be given at a specific time then that order must be followed. Therefore if an order was to have the medication given before a meal and it was given after the meal this is considered an error. This would be the same if the physician ordered the medication to be given after a meal and it was given before the meal. Another example would be when physicians order medications to be administered at a very specific time because a patient may be having a test or procedure where the timing of the medication is important. If the medication is not given as directed by that order it is considered an error.

Now what about when a physician writes orders for a medication to be given twice a day or three times a day. The order may not specify a time so how do you know when it is an error based on the time the medication was given? Facilities typically have a policy for daily, twice daily, three time daily etc. orders. For example, typical policies may define that twice-daily orders are administered at 8 a.m. and 8 p.m. Occasionally facilities and pharmacies may adjust those times based on specific resident or medication needs. To determine if there is a timing error in these situations you must follow the guidelines from the Centers for Medicare and Medicaid Services. The guidelines state that a timing error occurs if a medication is given greater than 60 minutes prior to or after the scheduled time for the medication. This applies only when the timing of the medication administration could cause discomfort or jeopardizes the resident's health and safety.

So for example, a resident has a once daily vitamin order and the facility policy is to have once daily medications administered at 8 a.m. During observation the facility did not administer the vitamin until 6 p.m. In most instances getting a vitamin later in the day is not going to discomfort the resident or jeopardize their health. Therefore this would not be considered an error. Another way to look at the 60 minute rule is to ask the following question: If this medication is not administered 60 minutes prior or 60 minutes after its scheduled time would this harm the resident? If the answer is yes then the early or late medication administration is considered an error.

How do you determine if the timing of the medication within the 60-minute timeframe is important? You should look at two things. First look at the resident. What is their disease, are they stable? Also look at the drug. What are the manufacturer recommendations? What are the characteristics of the medication?

Here is an example that could be considered an error. A resident takes his antidepressant medications in the evening because it causes drowsiness and actually helps him sleep better. Therefore the medication is scheduled to be given at 8 p.m. However the staff gives the medication in the morning at 8 a.m. and two hours later you observe the resident sleeping most of the day and observe that night that the resident cannot sleep. This situation distressed the resident and caused discomfort. This could be considered a medication error.

So when looking at a potential medication error based on the time the drug was administered first look at the physician's order then apply the 60 minute rule only if the timing of the drug administration is important to protect the safety and welfare of the resident.

# Happy Holidays!

References are available upon request.